



TAPE RECORDER



Service Manual

SINGLE POINT ELECTRET STEREO MICROPHONE



MODEL **RP-3200E**

SPECIFICATIONS

Frequency characteristics:	50~15,000 Hz
Sensitivity:	-72 dB (0 dB=1 V/1 μ bar)
Output impedance:	600 Ω \pm 20% (at 1 kHz)
Inherent noise:	35 dB SPL
Wind noise:	55 dB SPL
Maximum sound pressure level:	120 dB SPL
Required battery:	One UM-3 (Size AA) Note: an on-off switch provided
Microphone cable:	5 mm ϕ , 5 m, in length with standard Phone-Type Plug

These specifications are subject to change in order to accommodate improvements in design.

Matsushita Electric
Matsushita Electric Trading Co., Ltd.
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LOCATION OF CONTROLS AND COMPONENTS

Windscreen: The windscreen prevents unwanted noise from being picked up when recording outdoors, as well as unwanted "popping" noise when the microphone is hand held indoors, and assures that recordings will be of higher quality.

ON-OFF Switch: OFF: Power source is turned OFF.
 STAND BY: Only power source is turned ON, but output is not obtained.
 MIC ON: Output is obtained.

Battery Terminal ⊕

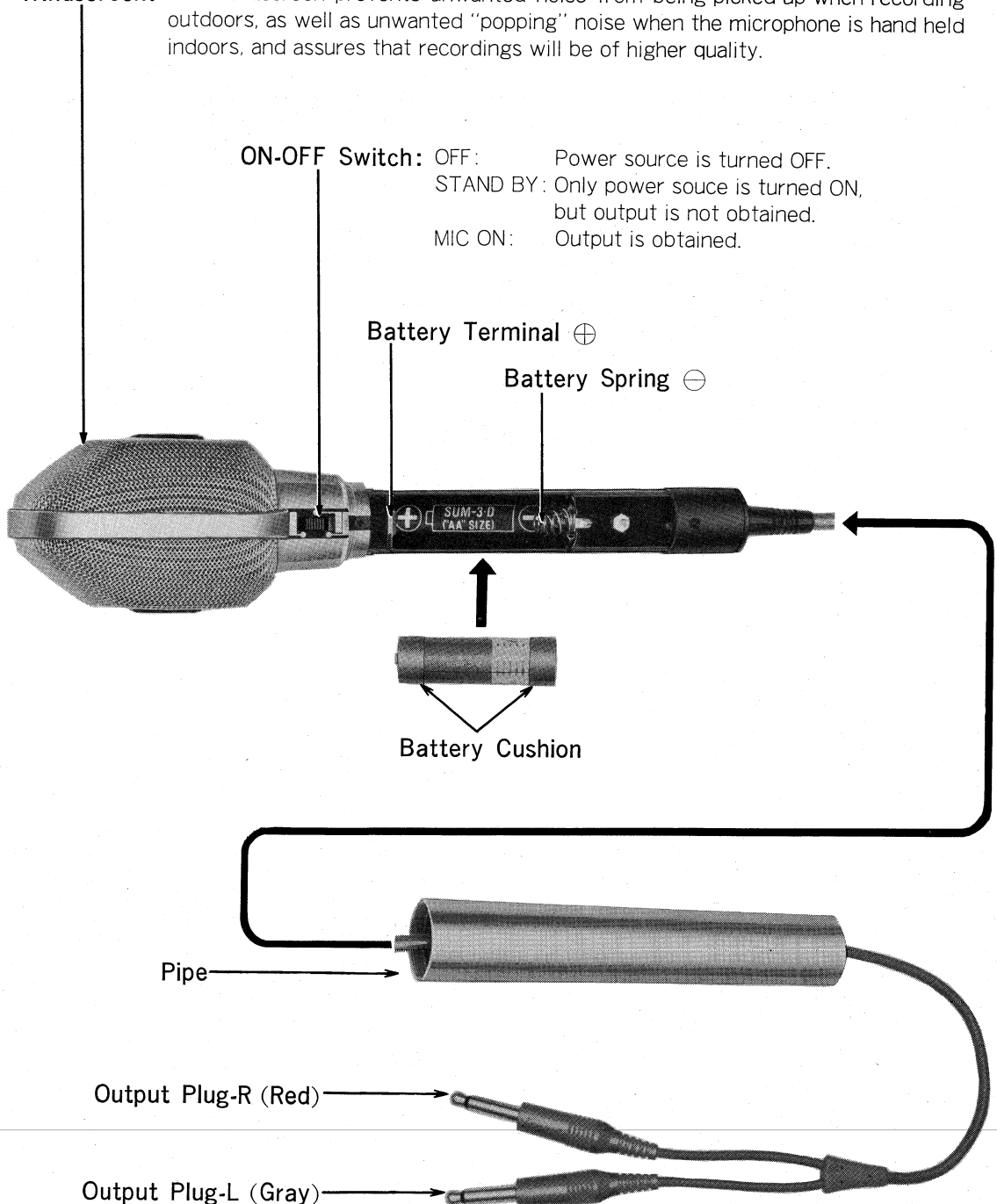
Battery Spring ⊖

Battery Cushion

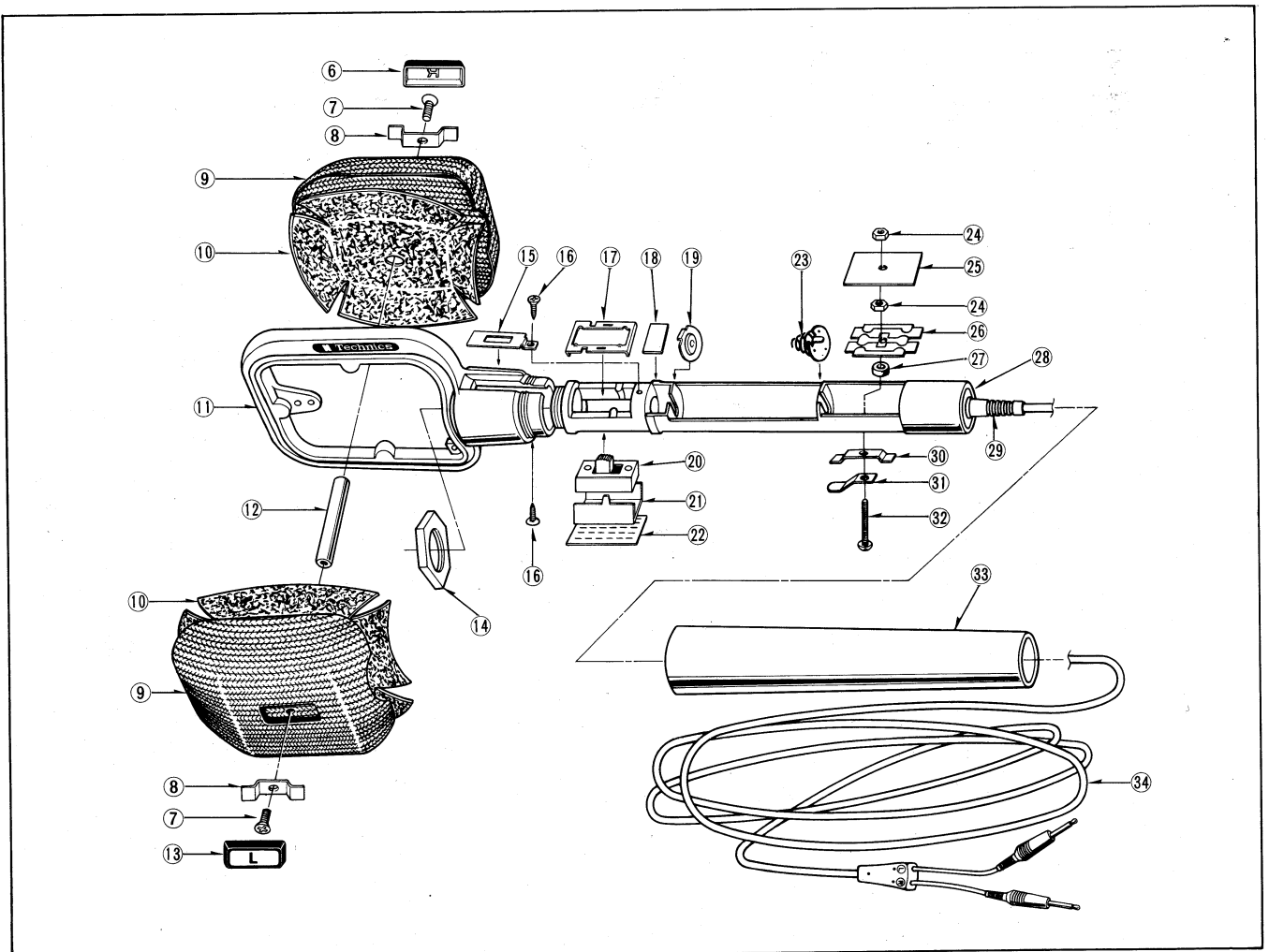
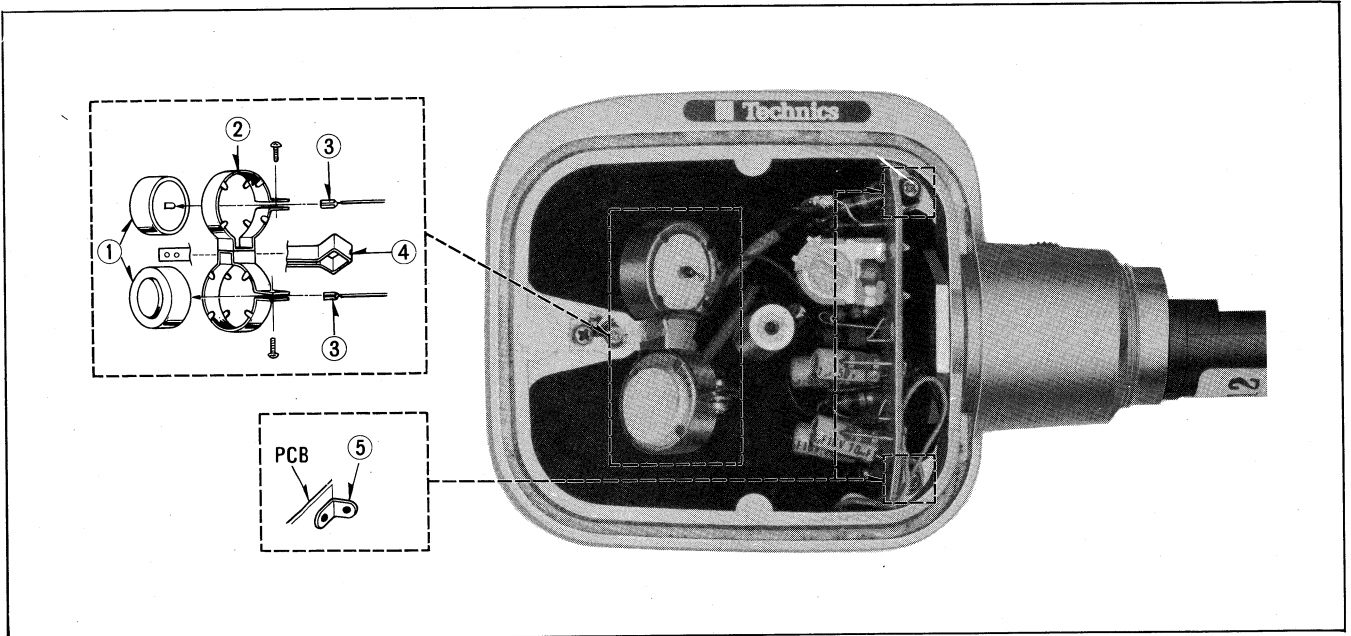
Pipe

Output Plug-R (Red)

Output Plug-L (Gray)

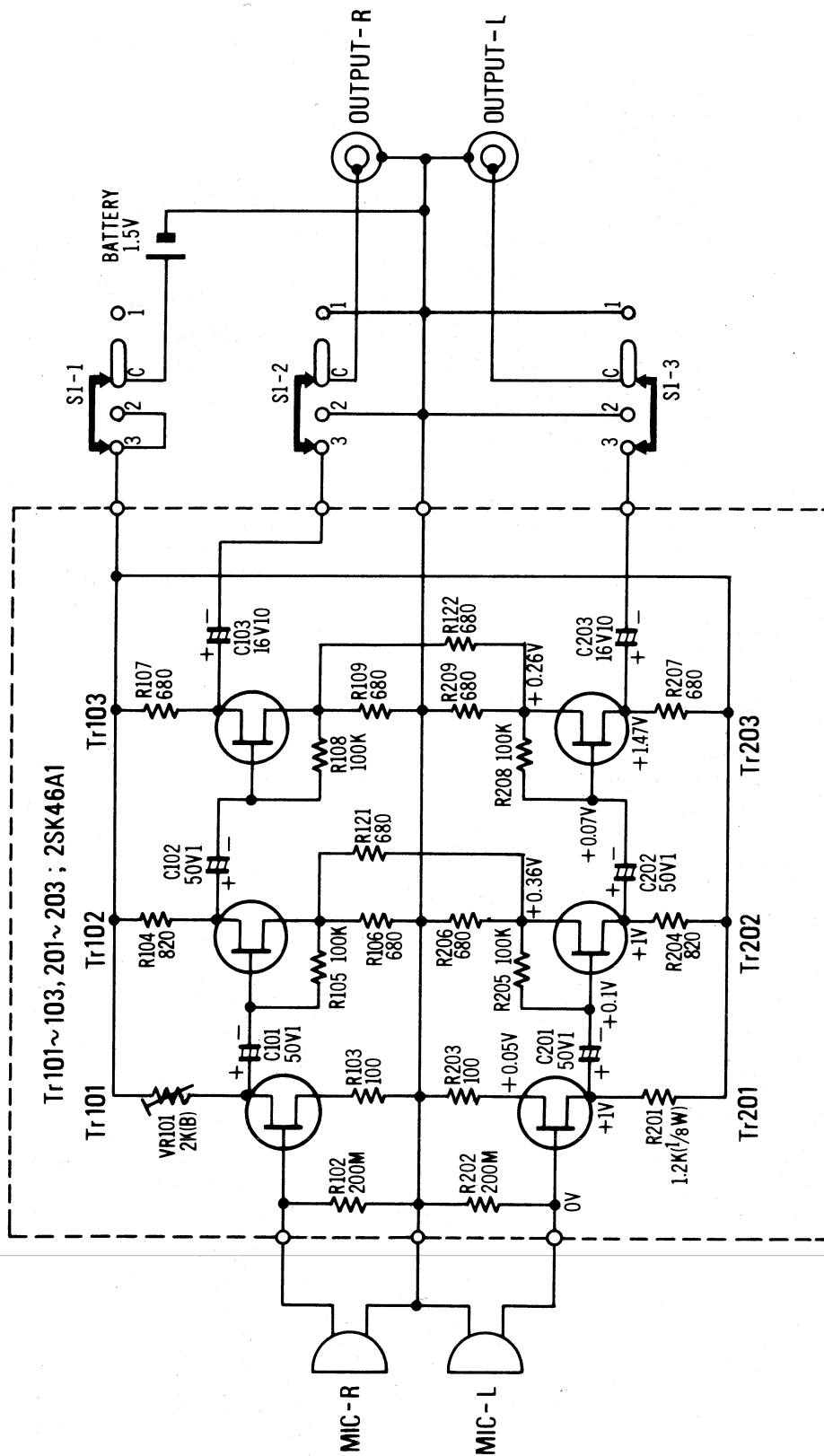


PARTS LOCATION



NOTE: To disassembly, after removing L-indicator ⑬ pasted on indicator retainer ⑧, unscrew ⑦, and remove a left side net ⑨.

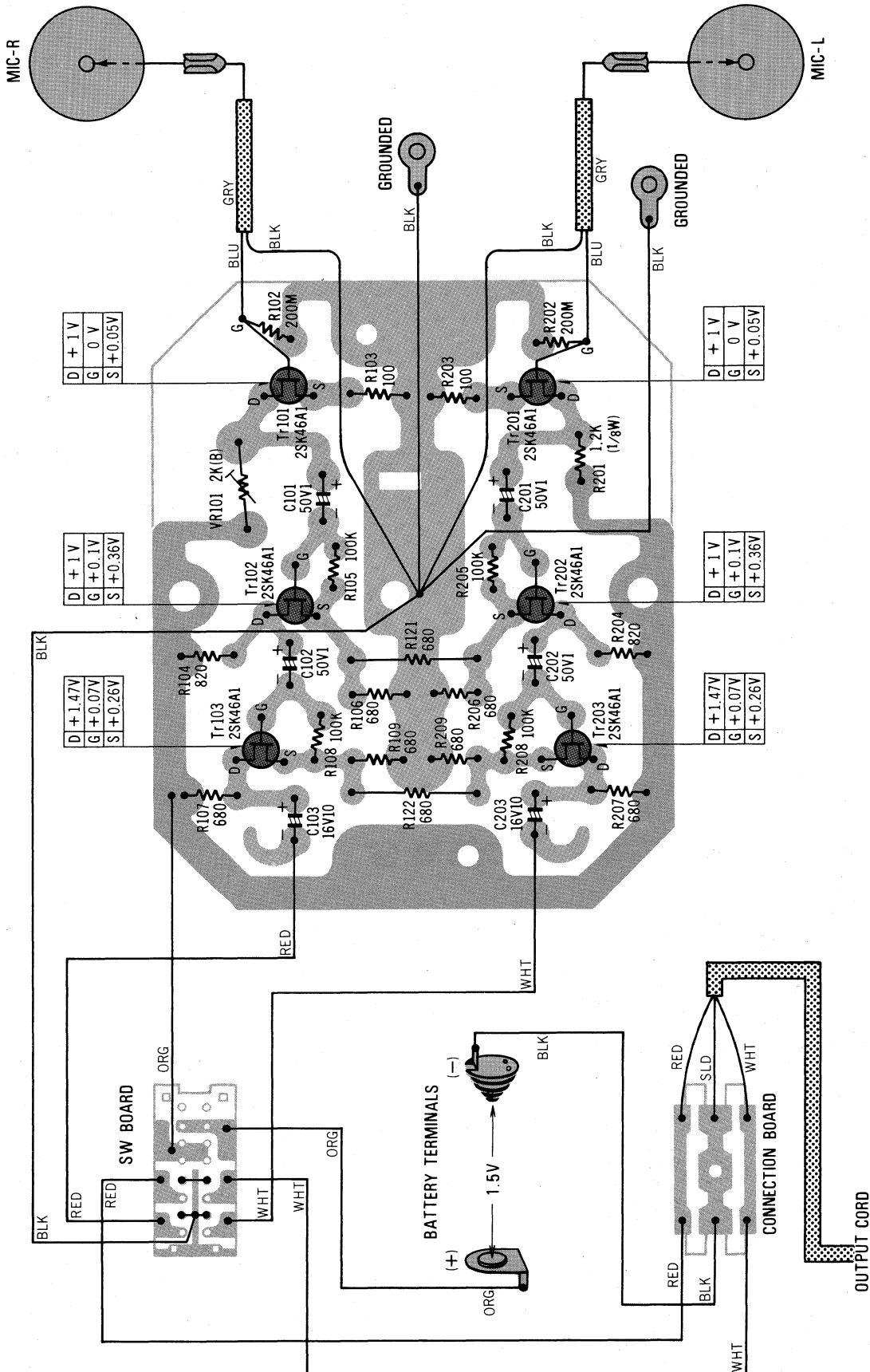
SCHEMATIC DIAGRAM MODEL RP-3200E



NOTE:

1. S1 Power ON/OFF switch.
1...OFF, 2...STAND BY, 3...ON.
2. VR101 Balance adjustment VR.
3. Resistor values are in ohms (Ω), 1/4 watt unless specified otherwise.
K=1000 Ω , M=1,000,000 Ω .
4. Capacitor values are in microfarads (μ F) unless specified otherwise.
P=Pico-farads.
5. Voltages are shown the value measured with VTVM.
Each value indicated in L-channel is applicable to R-channel too.

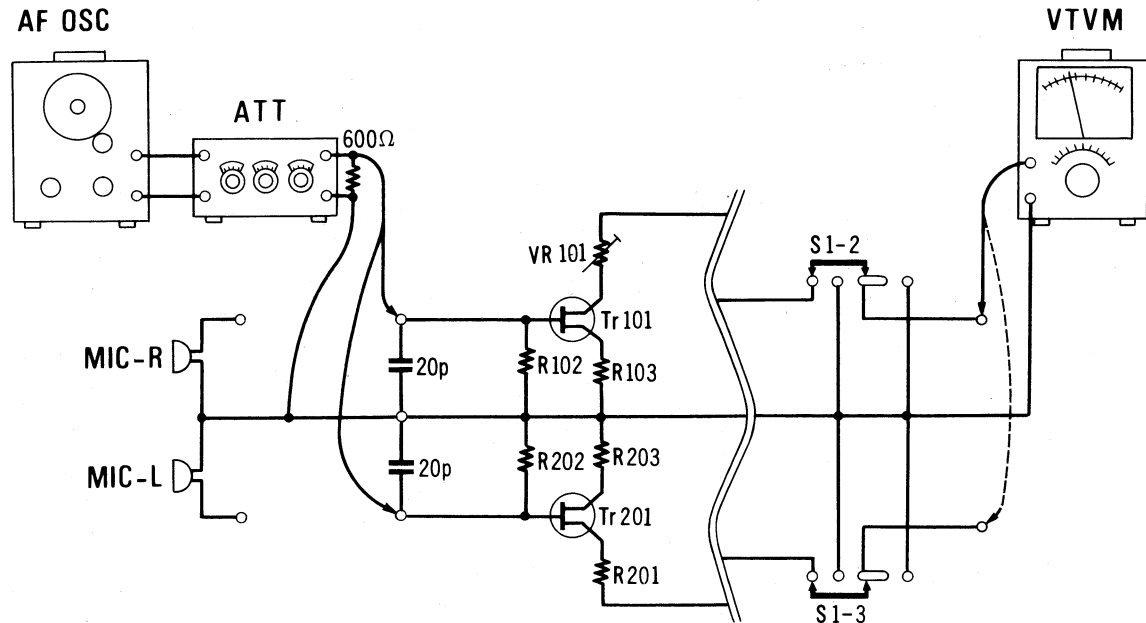
CIRCUIT BOARD



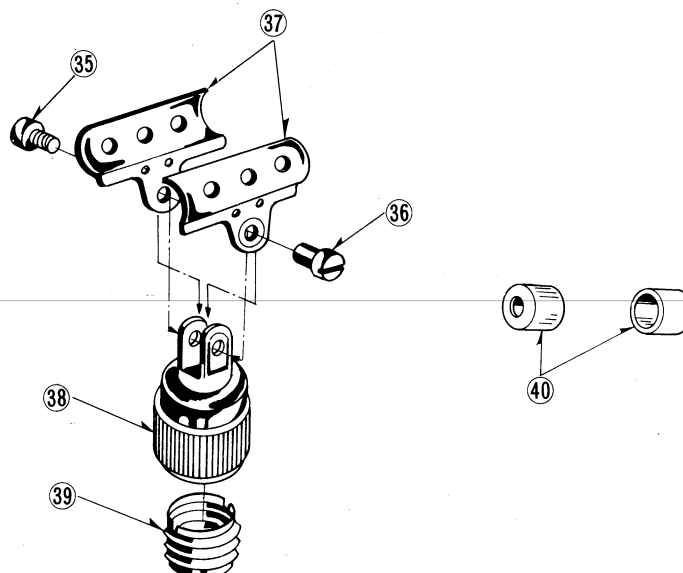
ADJUSTMENT

Make sure the adjustment of output balance when changing FET and etc. in servicing. The procedure is as follows.

1. Remove both mic-units from the gates of FETs (Tr101, Tr201).
2. Connect 20 pF capacitors between each gate of FETs (Tr101, Tr201) and ground.
3. Apply the signal of 1 kHz, 10 mV to the gates of FETs simultaneously.
4. Adjust VR101 for balanced output.



ACCESSORIES



REPLACEMENT PARTS LIST

MODEL RP-3200E (Technics)

NOTE:

1. Be sure to make your orders replacement parts according to this list.
2. "N" in "Remark" column indicates new parts.

RP-3200E

Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
	<u>RESISTORS</u>					
R102, 201	Solid Resistor 200 M Ω 1/4 W	ERC14GS207	2			N
R103, 203	" 100 Ω 1/4 W	ERC14GK101	2			COMMON
R104, 204	" 820 Ω 1/4 W	ERC14GK821	2			"
R105, 108, 205, 208	" 100 K Ω 1/4 W	ERC14GK104	4			"
R106, 107, 109, 121, 122, 206, 207, 209						
	" 680 Ω 1/4 W	ERC14GK681	8			"
R201	" 1.2 K Ω 1/8 W	ERC18GK122	1			"
	<u>VARIABLE RESISTOR</u>					
VR101	Semi-fixed Variable Resistor 2 K Ω (B)	EVLW0A00B23	1			N
	<u>CAPACITORS</u>					
C101, 102, 201, 202	Electrolytic Capacitor 1 μ F	ECEA50V1L	4			COMMON
C103, 203	" 10 μ F	ECEA16V10L	2			"
	<u>TRANSISTORS</u>					
Tr101, 102, 103, 201, 202, 203						
	FET	2SK46A1	6			N
	<u>COMPONENT PARTS</u>					
1	Microphone Unit	EM04	2			N
2	Microphone Holder	YPMMK194AA4	1			N
3	Connector	YPMEE010AA4	2			N
4	Microphone Metal	YPMMK195AA4	1			N
5	PCB Holder	YPMMK204AA4	2			N
6	R-Indicator	YPMHK306BA4	1			N
7	Screw \oplus 2.6 \times 6	XSC26+6FT	2			COMMON
8	Indicator Retainer	YPMMK205AA4	2			N

Ref. No.	Description	Part No.	Pcs/ Set	Price (Per Pce.)		Remarks
9	Net	YPMMN168AA3	2			N
10	Filter	YPMMQ142AA4	2			N
11	Case	YPMSS002AA	1			N
12	Pole	YPMMP053AA4	1			N
13	L-Indicator	YPMHK307BA4	1			N
14	Nut	YPMMJ157BA4	1			N
15	Switch Indicator	YPMHK312AA4	1			N
16	Screw $\oplus 2 \times 4$	XTS2+4A	2			COMMON
17	Switch Angle-B	YPMMK202AA4	1			N
18	Pad Plate	YPMHK288AA4	1			RP-3550E, 3830E
19	Battery Terminal \oplus	YPMMX031AA4	1			"
20	Slide Switch	YPMES043AA	1			N
21	Switch Angle-A	YPMMK197CA4	1			N
22	Switch Board	YPMEP109AA4	1			N
23	Battery Terminal \ominus	YPMKM146AA4	1			RP-3550E
24	Nut 2.6 ϕ	XNG26	2			COMMON
25	PCB Cover	YPMMC398AA	1			N
26	Connection Board	YPMEP110AA4	1			N
27	Spacer	YPMMC438AA4	1			N
28	Mic End	YPMSS001AA	1			N
29	Cord Bushing	YPMMH065AA4	1			N
30	PCB Set Metal	YPMMK201BA4	1			N
31	Contact Metal	YPMMS078BA4	1			N
32	Screw $\oplus 2.6 \times 14$	XSN26+14FT	1			COMMON
33	Pipe	YPMMC444AA4	1			N
34	Output Cord	YPM EK357CA3	1			N
35	Mic Holder Screw-B	YPM MJ142AA4	1			RP-3550E, 3850E
36	Mic Holder Screw-A	YPM MJ141AA4	1			"
37	Mic Holder	YPMMA185CA4	2			"
38	Mic Holder Screw	YPMMA184BA4	1			"
39	Conversion Adaptor	YPM MJ165AA4	1			"
40	Battery Cushion	YPM MG077BA4	2			"
41	Lether Case	YPM PN275AA4	1			N
42	Packing Case	YPM PN274AA4	1			N
43	Instruction Book	YPM PJ083AA	1			N